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FILE 'HOME' ENTERED AT 08:36:47 ON 08 JAN 2007

FILE 'REGISTRY' ENTERED AT 08:37:48 ON 08 JAN 2007
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STRUCTURE FILE UPDATES: 7 JAN 2007 HIGHEST RN 916885-50-2
DICTIONARY FILE UPDATES: 7 JAN 2007 HIGHEST RN 916885-50-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

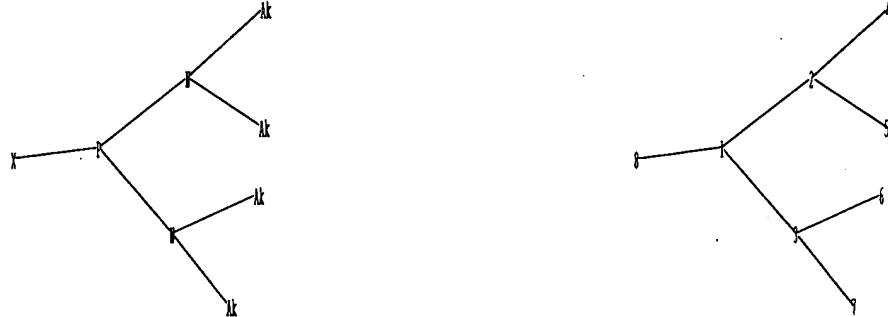
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10539210a.str



chain nodes :

1 2 3 4 5 6 7 8

chain bonds:

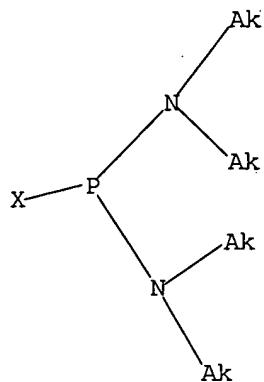
chain bonds : 1-2 1-3 1-8 2-4 2-5 3-6 3-7

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exact/norm bonds :  
1-2 1-3 2-4 2-5 3-6 3-7  
exact bonds :  
1-8
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Match level :  
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS
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L1      STRUCTURE UPLOADED
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=> d  
L1 HAS NO ANSWERS  
L1      STR
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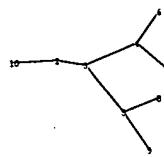
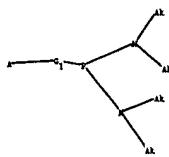
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Structure attributes must be viewed using STN Express query preparation.
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=> s 11 full  
FULL SEARCH INITIATED 08:38:00 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED -      5868 TO ITERATE  
  
100.0% PROCESSED      5868 ITERATIONS  
SEARCH TIME: 00.00.01
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1418 ANSWERS
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L2      1418 SEA SSS FUL L1
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=>  
Uploading C:\Program Files\Stnexp\Queries\10539210.str
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chain nodes :

2 3 4 5 6 7 8 9 10

chain bonds :

2-3 2-10 3-4 3-5 4-6 4-7 5-8 5-9

exact/norm bonds :

2-3 2-10 3-4 3-5 4-6 4-7 5-8 5-9

G1:O,S

Match level :

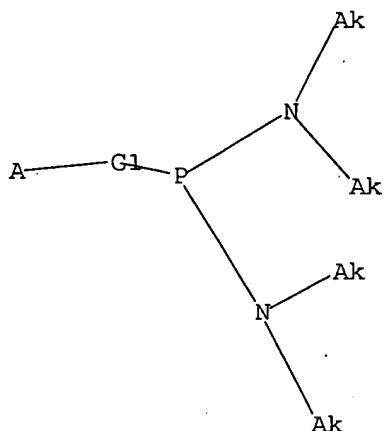
2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



G1 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s 13 full
 FULL SEARCH INITIATED 08:38:29 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 33951 TO ITERATE

100.0% PROCESSED 33951 ITERATIONS 2529 ANSWERS
 SEARCH TIME: 00.00.01

L4 2529 SEA SSS FUL L3

=> file caplus	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	343.75	344.17

FILE 'CAPLUS' ENTERED AT 08:38:34 ON 08 JAN 2007
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FILE COVERS 1907 - 8 Jan 2007 VOL 146 ISS 3
 FILE LAST UPDATED: 7 Jan 2007 (20070107/ED)

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<http://www.cas.org/infopolicy.html>

=> s 12 and 14
 1654 L2
 3010 L4

L5 381 L2 AND L4

=> s 15 and alcohol
257867 ALCOHOL
169308 ALCOHOLS
395298 ALCOHOL
(ALCOHOL OR ALCOHOLS)

583314 ALC
192399 ALCS
681236 ALC
(ALC OR ALCS)

834779 ALCOHOL
(ALCOHOL OR ALC)

L6 40 L5 AND ALCOHOL

=> s 15 and ?anol

764747 ?ANOL

L7 69 L5 AND ?ANOL

=> d 16 1-10

L6 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:471844 CAPLUS
 DN 143:28318
 TI Micronized wood preservative formulations
 IN Leach, Robert M.; Zhang, Jun
 PA USA
 SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 821,326.
 CODEN: USXKCO
 DT Patent
 LA English
 FAN.CNT 6

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2005118280	A1	20050602	US 2004-970446	20041021
US 2004258767	A1	20041223	US 2004-821326	20040409
WO 2006047126	A2	20060504	WO 2005-US37303	20051018
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, EW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2006257578	A1	20061116	US 2006-354726	20060215
PRAI US 2003-461547P	P	20030409		
US 2003-518994P	P	20031111		
US 2004-821326	A2	20040409		
US 2004-568485P	P	20040506		
US 2004-565585P	P	20040427		
US 2004-570659P	P	20040513		
US 2004-970446	A	20041021		
US 2005-126839	A2	20050511		

L6 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:971591 CAPLUS
 DN 140:28164
 TI Process for preparation of block polymers by radical polymerization controlled with dithiophosphate esters
 IN Destarac, Mathias; Leising, Frédéric; Taton, Daniel; Dureault, Alex; Gnanou, Yves; Majoral, Jean Pierre; Marchand, Patrice; Caminade, Anne Marie
 PA Rhodia Chimie, Fr.
 SO Fr. Demande, 38 pp.
 CODEN: FRXKBL
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 2840613	A1	20031212	FR 2002-7022	20020607
WO 2003104288 A1 20031218 WO 2003-FR1705 20030606				
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NL, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, U2, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
AU 2003251114	A1	20031222	AU 2003-251114	20030606
PRAI FR 2002-7022	A	20020607		
WO 2003-FR1705 W 20030606				
RE.CNT 2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD			
ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L6 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:509532 CAPLUS
 DN 137:201392
 TI Design, Synthesis, and Biological Evaluation of Indolequinone Phosphoramidate Prodrugs Targeted to DT-diaphorase
 AU Hernick, Marcy; Flader, Carolee; Borch, Richard F.
 CS Department of Medicinal Chemistry and Molecular Pharmacology and the Cancer Center, Purdue University, West Lafayette, IN, 47907, USA
 SO Journal of Medicinal Chemistry (2002), 45(16), 3540-3548
 CODEN: JOMCAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 137:201392
 RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:200702 CAPLUS
 DN 136:349749
 TI The first iminoamidophosphite ligand: synthesis and complexation with rhodium(I)
 AU Gavrilov, K. N.; Bondarev, O. G.; Polosukhin, A. I.; Lyubimov, S. E.; Tzarev, V. N.
 CS Neesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Moscow, 117813, Russia
 SO Russian Journal of Coordination Chemistry (Translation of Koordinatsionnaya Khimiya) (2002), 28(2), 143-145
 CODEN: RJCCBY; ISSN: 1070-3284
 PB MAIK Nauka/Interperiodica Publishing
 DT Journal
 LA English
 OS CASREACT 136:349749
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:376020 CAPLUS
 DN 133:164102
 TI Fluorinated phosphorus compounds. Part 1. The synthesis and reactions of some fluorocalkyl phosphoryl compounds
 AU Timperley, C. M.; Bird, M.; Broderick, J. F.; Holden, I.; Morton, I. J.; Waters, M. J.
 CS Chemical and Biological Defence Sector, Defence Evaluation and Research Agency, Salisbury, Wiltshire, SP4 0JQ, UK
 SO Journal of Fluorine Chemistry (2000), 104(2), 215-223
 CODEN: JFLCAR; ISSN: 0022-1139
 PB Elsevier Science S.A.
 DT Journal
 LA English
 OS CASREACT 133:164102
 RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1997:181081 CAPLUS
 DN 126:186316
 TI Preparation of L-ascorbic acid 2-phosphate α -hydroxy acid esters having excellent storage stability
 IN Morizaki, Kazuo; Sasaki, Masanao; Ozaki, Shoichiro; Watanabe, Yutaka
 PA Kanto Denka Kogyo Kk, Japan; Ozaki Shoichiro
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI JP 09020790 A 19970121 JP 1995-167638 19950703
 JP 3619287 B2 20050209
 PRAI JP 1995-167638 19950703
 OS MARPAT 126:186316

L6 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:868733 CAPLUS
 DN 124:87148
 TI Reaction of tervalent phosphorus compounds with sterically hindered N-chloramines
 AU Kolodazhnyi, Oleg I.; Golovatyj, Oleg R.
 CS Inst. of Bicorganic Chemistry, National Academy of Sciences of Ukraine, Kiev, 253094, Ukraine
 SO Phosphorus, Sulfur and Silicon and the Related Elements (1995), 102(1-4), 133-41
 CODEN: PSSLEI; ISSN: 1042-6507
 PB Gordon & Breach
 DT Journal
 LA English
 OS CASREACT 124:87148

L6 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:273379 CAPLUS
 DN 123:112591
 TI Use of Npe-protecting groups for the preparation of oligodeoxyribonucleotides without using nucleophiles during the final deprotection
 AU Avino, Anna Maria; Eritja, Ramon
 CS CID, CSIC, Barcelona, 08034, Spain
 SO Nucleosides & Nucleotides (1994), 13(10), 2059-69
 CODEN: NUNUD5; ISSN: 0732-8311
 PB Dekker
 DT Journal
 LA English
 OS CASREACT 123:112591

L6 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:269228 CAPLUS
DN 120:269228
TI A convenient method for the transformation of alcohols into
alkyl trifluoromethyl sulfides
AU Kolomeitsev, A. A.; Chabanenko, K. Yu.; Roeschenthaler, G. V.;
Yagupolskii, Yu. L.
CS Inst. Org. Chem., Kiev, 253660, Ukraine
SO Synthesis (1994), (2), 145-6
CODEN: SYNTBF; ISSN: 0039-7881
DT Journal
LA English
OS CASREACT 120:269228

L6 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:107134 CAPLUS
DN 120:107134
TI Transformations of thiocyanoalkyl phosphites and amidophosphites
AU Nuretdinova, O. N.; Novikova, V. G.; Troitskaja, L. B.
CS A. E. Arbuzov Inst. Org. Phys. Chem., Kazan, 420083, Russia
SO Izvestiya Akademii Nauk, Seriya Khimicheskaya (1992), (11), 2673-5
CODEN: IASKEA; ISSN: 1026-3500
DT Journal
LA Russian
OS CASREACT 120:107134

=> d 16 1-10 ibib abs hitstr

L6 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2005471844 CAPLUS
 DOCUMENT NUMBER: 143:28318
 TITLE: Micronized wood preservative formulations
 INVENTOR(S): Leach, Robert M.; Zhang, Jun
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.
 Ser. No. 821,326.
 CODEN: USXKCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

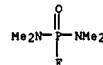
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 200518280	A1	20050602	US 2004-970446	20041021
US 2004258767	A1	20041223	US 2004-821326	20040409
WO 2006047126	A2	20060504	WO 2005-US37303	20050118
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
EW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, EW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2006257578	A1	20061116	US 2006-354726	20060215
PRIORITY APPLN. INFO.:			US 2003-461547P	P 20030409
			US 2003-518994P	P 20031111
			US 2004-821326	A2 20040409
			US 2004-568485P	P 20040506
			US 2004-565585P	P 20040427
			US 2004-570659P	P 20040513
			US 2004-970446	A 20041021
			US 2005-126839	A2 20050511

AB The wood preservative compns. comprising micronized particles. The composition comprises dispersions of micronized metal or metal compds. The wood preservative composition comprises an inorg. component comprising a metal or metal compound and organic biocide. When the composition comprises an inorg. component and an organic biocide, the inorg. component or the organic biocide or both are present as micronized particles. When used for preservation of wood, the micronized particles can be observed as uniformly distributed within the wood and there is minimal leaching of the metal and biocide from the wood.

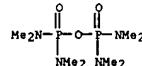
IT 115-26-4, Dimefox 152-16-9, Schradan
 RL: BUV (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
 (micronized wood preservative formulations comprising inorg. metal compds. and organic biocides)

RN 115-26-4 CAPLUS
 CN Phosphorodiamidic fluoride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX, NAME)

L6 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 152-16-9 CAPLUS
 CN Diphosphoramido, octamethyl- (9CI) (CA INDEX NAME)



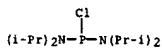
L6 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003971591 CAPLUS
 DOCUMENT NUMBER: 140:28164
 TITLE: Process for preparation of block polymers by radical polymerization controlled with dithiophosphate esters
 INVENTOR(S): Destarac, Mathias; Leising, Frederic; Taton, Daniel;
 Dureault, Alex; Ghanou, Yves; Majoral, Jean Pierre;
 Marchand, Patrice; Caminade, Anne Marie
 PATENT ASSIGNEE(S): Rhodia Chimie, Fr.
 SOURCE: Fr. Demande, 38 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2840613	A1	20031212	FR 2002-7022	20020607
WO 2003104288	A1	20031218	WO 2003-FR1705	20030606
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
AU 2003251114	A1	20031222	AU 2003-251114	20030606
PRIORITY APPLN. INFO.:			FR 2002-7022	A 20020607
			WO 2003-FR1705	W 20030606

AB The block copolymers are prepared through a 1st stage by radical polymerization of a mixture containing ≥ 1 unsatd. monomer, a free radical initiator, and ≥ 1 dithiophospho ester compound having ≥ 1 P-N bonding to give a living polymer which can be further polymerized to a block copolymer. An example of such dithiophospho ester is Ph2NP(S)(SC6H2P)2 (preparation given).

IT 56183-63-2
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (process for preparation of block polymers by radical polymerization controlled with dithiophosphate esters)

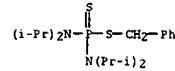
RN 56183-63-2 CAPLUS
 CN Phosphorodiamidous chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)



IT 632285-75-7P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (telogen process for preparation of block polymers by radical polymerization)

L6 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 Controlled with dithiophosphate esters)

RN 632285-75-7 CAPLUS
 CN Phosphorodiamidothioic acid, tetrakis(1-methylethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:509532 CAPLUS

DOCUMENT NUMBER: 137:201392

TITLE: Design, Synthesis, and Biological Evaluation of Indolequinone Phosphoramidate Prodrugs Targeted to DT-diaphorase
AUTHOR(S): Hernick, Marcy; Flader, Carolee; Borch, Richard F.
CORPORATE SOURCE: Department of Medicinal Chemistry and Molecular Pharmacology and the Cancer Center, Purdue University, West Lafayette, IN, 47907, USA
SOURCE: Journal of Medicinal Chemistry (2002), 45(16), 3540-3548

CODEN: JMCARL ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:201392

AB 2- And 3-substituted indolequinone phosphoramidate prodrugs targeted to DT-diaphorase (DDT) were synthesized and evaluated. These compds. (e.g. (5-methoxy-1-methyl-4,7-indolequinon-2-yl)methyl N,N-bis(2-bromoethyl)phosphoramidate) are designed to undergo activation via quinone reduction by DDT followed by expulsion of the phosphoramidate mustard substituent from the hydroquinone. Chemical reduction of the

phosphoramidate prodrugs led to rapid expulsion of the corresponding phosphoramidate anions in both series of compds. Compds. substituted at the 2-position are excellent substrates for human DDT (Kcat/KM = (2-5) + 106 M⁻¹ s⁻¹); however, compds. substituted at the 3-position are potent inhibitors of the target enzyme. Both series of compds. are toxic in HT-29 and BE human colon cancer cell lines in a clonogenic assay. There was a correlation found between cytotoxicity and DDT activity for the 2-series of phosphoramidates; however, there was no correlation between cytotoxicity and DDT activity in the 3-series of compds. This finding suggests an alternative mechanism for the activation of these compds.

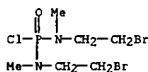
IT 452971-56-1, N,N'-Bis(2-bromoethyl)-N,N'-dimethylphosphoramidic chloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation with hydroxymethyl-substituted indoleidone)

RN 452971-56-1 CAPLUS

CN Phosphoramidic chloride, N,N'-bis(2-bromoethyl)-N,N'-dimethyl- (9CI) (CA INDEX NAME)



IT 318974-70-8P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and evaluation of indolequinone phosphoramidates as prodrug targeted to DT-diaphorase)

RN 318974-70-8 CAPLUS

CN Phosphoramidic acid, N,N'-bis(2-bromoethyl)-N,N'-dimethyl- (4,7-dihydro-5-methoxy-1-methyl-4,7-dioxo-1H-indol-3-yl)methyl ester (9CI) (CA INDEX NAME)

ACCESSION NUMBER: 2002:200702 CAPLUS

DOCUMENT NUMBER: 136:349749

TITLE: The first iminomimidophosphate ligand: synthesis and complexation with rhodium(I)
AUTHOR(S): Gavrilov, K. N.; Bondarev, O. G.; Polosukhin, A. I.; Lyubimov, S. E.; Tzarev, V. N.
CORPORATE SOURCE: Nenamyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Moscow, 117913, Russia
SOURCE: Russian Journal of Coordination Chemistry (Translation of Koordinatsionnaya Khimiya) (2002), 28(2), 143-145
CODEN: RJCCEY; ISSN: 1070-3284

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:349749

AB Optically active amidophosphate with the peripheral amino group (R)-(Et₂N)R₂POCH₂CH₂NH₂Cl (RN) was synthesized through 1-stage phosphorylation of the corresponding amino alc. Its reaction with [Rh(CO)₂Cl]₂ (at P: Rh = 1) yields the mononuclear chelate [Rh(CO)(RN)Cl]₂. Structures of the compds. are determined by IR, ³¹P, and

13C NMR spectroscopy, mass spectrometry, and polarimetry.

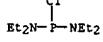
IT 685-63-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(for preparation of iminomimidophosphate and its rhodium complex)

RN 685-63-6 CAPLUS

CN Phosphoramidous chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

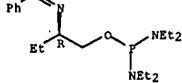


IT 418779-53-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and complexation with rhodium)

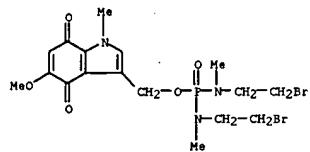
RN 418779-53-0 CAPLUS

CN Phosphoramidous acid, tetraethyl-, (2R)-2-((phenylmethylen)amino)butyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

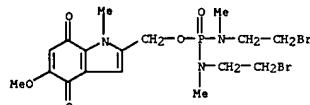


IT 318974-72-0P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and evaluation of indolequinone phosphoramidates as prodrug targeted to DT-diaphorase)

RN 318974-72-0 CAPLUS

CN Phosphoramidic acid, N,N'-bis(2-bromoethyl)-N,N'-dimethyl-, (4,7-dihydro-5-methoxy-1-methyl-4,7-dioxo-1H-indol-2-yl)methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT:

32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:376030 CAPLUS

DOCUMENT NUMBER: 133:164102

TITLE: Fluorinated phosphorus compounds. Part 1. The synthesis and reactions of some fluoroalkyl phosphoryl compounds

AUTHOR(S): Turnerley, C. M.; Bird, M.; Broderick, J. F.; Holden, I.; Morten, I. J.; Waters, M. J.

CORPORATE SOURCE: Chemical and Biological Defence Sector, Defence Evaluation and Research Agency, Salisbury, Wiltshire, SP4 0JQ, UK

SOURCE: Journal of Fluorine Chemistry (2000), 104(2), 215-223

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:164102

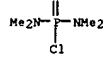
AB Fluoroalkyl phosphorochloridates CF₃CH₂OP(O)Cl₂ and (PF₃CH₂)₂OP(O)Cl (RF = CF₃, C₂F₅) were prepared from phosphorus oxychloride, fluorooxalates, and triethylamine. Selective substitution was difficult. Phosphates (PF₃CH₂)₂OP(O)OR (RF = CF₃, C₂F₅ and R = Me, Et, n-Pr, i-Pr) were isolated in yields of 38-84% from the reactions of the phosphorochloridates with alkyl and triethylamine. Success of the inverse reaction, i.e., ROP(O)Cl₂ and RF₃Cl₂, depended on the R group (Me, Et) and the RF group (CF₃, C₂F₅). The phosphates did not react with bromotrimethylsilane in chloroform. Addition of amines to CF₃CH₂OP(O)Cl₂ or (CF₃CH₂)₂OP(O)Cl gave phosphoramidates (RFN(R')₂OP(O)OCF₃ or (CF₃CH₂)₂OP(O)NR') (R and R' = H, Me, Et) in yields of 58-75%. The inverse reactions of Me₂NP(O)Cl₂ and (Me₂N)₂PF₃ with trifluoroethanol were slow, but were catalyzed by 4-dimethylaminopyridine. Anhydrous hydrogen chloride split one of the P-N bonds of (Me₂N)₂PF₃ to trifluoroethanol to give Me₂NP(O)Cl(OCH₂CF₃) to give Me₂NP(O)Cl(OCH₂CF₃) but did not react with (CF₃CH₂)₂OP(O)NHe₂.

IT 1605-65-8

RL: RCT (Reactant); RACT (Reactant or reagent) (nucleophilic substitution reaction with fluoroalkyl alcs.)

RN 1605-65-8 CAPLUS

CN Phosphoramidic chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

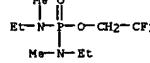


IT 207931-21-9P 207931-22-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

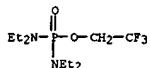
RN 207931-21-9 CAPLUS

CN Phosphoramidic acid, N,N'-diethyl-N,N'-dimethyl-, 2,2,2-trifluoroethyl ester (9CI) (CA INDEX NAME)



RN 287931-22-0 CAPLUS

CN Phosphorodiamidic acid, tetraethyl-, 2,2,2-trifluoroethyl ester (9CI) (CA INDEX NAME)

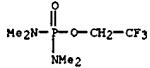


IT 287931-20-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (scission of one P-N bond by reaction with HCl, to form corresponding monochloride)

RN 287931-20-8 CAPLUS

CN Phosphorodiamidic acid, tetramethyl-, 2,2,2-trifluoroethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1997:181081 CAPLUS

DOCUMENT NUMBER: 126:186316

TITLE: Preparation of L-ascorbic acid 2-phosphate α -hydroxy acid esters having excellent storage stability

INVENTOR(S): Morizaki, Kazuo; Sasaki, Masanao; Ozaki, Shoichiro;

Watanabe, Yutaka

PATENT ASSIGNEE(S): Kanto Denka Kogyo KK, Japan; Ozaki Shoichiro

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

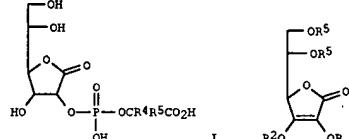
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09020790	A	19970121	JP 1995-167638	19950703
JP 3619287	B2	20050209	JP 1995-167638	19950703

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 126:186316

GI



AB The title compds. [I: R3, R4 = H, $(\text{CH}_2)_q(\text{CH}_3\text{Me})_r$, $\text{CH}[(\text{CH}_2)_m\text{e}]_u$, p, q, r, s, t, u = 0-20] are prepared by condensation of alkoxybis(substituted amino)phosphine of formula (R1R1N)2POR2 (R1 = sec- or tert-alkyl or R1R1N forms a heterocyclic amino; R2 = group cleavable upon reduction such as benzyl, methoxybenzyl, nitrobenzyl, or cyanobenzyl) with α -hydroxy acid of formula HOOCR3R4CO2R2 (R2, R3, R4 = same as above) in the presence of a condensing agent, condensation of the resulting R1R1N(OR2)OCR3R4CO2R2 (R1 = R4 = same as above) with an ascorbic acid derivative (II: R = H, R2 = same as above; R5 group listed in R2) followed by oxidation, and reductive deprotection of the resulting ascorbic acid 2-phosphate derivs. II [R = P(OR2)OCR3R4CO2R2; R2 = R5 = same as above]. They are stable vitamin C derivs. with excellent storage stability, have a broad range of physiol. and pharmaceutical activities such as antioxidant activity and melanin-formation inhibitory activity accompanied by reduction of melanin dyes and dopaquinone, and are useful for cosmetics, drugs, and foods. Thus, PhCH2OP[N(CH3)2]2 (preparation given)

was condensed with benzyl glycolate (preparation given) in the presence of 1H-tetrazole in CH2Cl2 at room temperature for 4 h to give 98% PhCH2OP[N(CH3)2]2OCH2CO2CH2Ph, which was similarly condensed with 3-O-benzyl-5,6-O-benzylidene-L-ascorbic acid at room temperature for 2 h followed by oxidation with m-chloroperbenzoic acid at 0° to room temperature for 1 h to give II [R = P(OCH2Ph)OCH2CO2CH2Ph, R2 = CH2Ph, R5R5 = CPh2].

The latter compd. was hydrogenolyzed over 5% Pd-C in MeOH under h atm. at room temp. for 30 h, filtered to remove the catalyst, evapd. in vacuo to remove the solvent, and passed through a column of Diaion SK1B (Na form) (cation exchanger) to give I.Na (R4 = R5 = H). A 1% soln. of the latter compd. in 50% aq. EtOH was tested for stability by heating it at 50° for 14 days or exposing it to sun light for 14 days to show residual ratio of 91.3 or 82.9%, resp., vs. 22.4 or 27.3%, resp. for ascorbic acid. A cosmetic soln. contg. 2.0 wt.% of the latter compd. was applied to 20 female panelists twice a day for 2 mo to show skin whitening effect for 16 panelists.

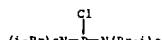
IT 56183-63-2P, Bis(diisopropylamino)chlorophosphine

108549-21-9P, Benzyloxobis(diisopropylamino)phosphine

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of L-ascorbic acid phosphate α -hydroxy acid esters with excellent storage stability as antioxidants and melanin formation inhibitors)

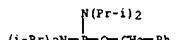
RN 56183-63-2 CAPLUS

CN Phosphorodiamidous chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 108549-21-9 CAPLUS

CN Phosphorodiamidous acid, tetrakis(1-methylethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1995:868733 CAPLUS

DOCUMENT NUMBER: 124:87148

TITLE: Reaction of tervalent phosphorus compounds with sterically hindered N-chloroamines

AUTHOR(S): Kolodiaznyi, Oleg I.; Golovatyi, Oleg R.

CORPORATE SOURCE: Inst. of Biorganic Chemistry, National Academy of Sciences of Ukraine, Kiev, 253094, Ukraine

SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (1995), 102(1-4), 133-41

CODEN: PSSLE; ISSN: 1042-6507

PUBLISHER: Gordon & Breach

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:87148

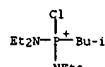
AB Reaction of tervalent P compds., e.g., $\text{P}(\text{Me}_2\text{CH})_2\text{N}X$ (X = Cl, Br) proceeds via the formation of halophosphonium intermediates, i.e., $(\text{Et}_2\text{N})_3\text{PX}^+$ ($\text{Me}_2\text{CH})_2\text{N}^-$ (1). Intermediates 1 react with alcs., e.g., MeOH, to afford alkoxyphosphonium salts, $(\text{Et}_2\text{N})_3\text{POMe}_2$ X- 1 transform into halophosphonium salts $(\text{Et}_2\text{N})_3\text{PX}^+$ X- or P-haloylides $(\text{Et}_2\text{N})_2\text{PCl}_2\text{CH}_2\text{Cl}$ (CH_2ClMe_2) (2). Steric hindrance at the N atom of intermediates (1) favor the formation of P-haloylides. The P-chloroylide 2 exists in the chlorotropic equilibrium

with the α -chloroalkylphosphine, i.e., $(\text{Et}_2\text{N})_2\text{PCH}_2\text{ClCH}_2\text{Me}_2$.

IT 172370-46-6P, SPN (Synthetic preparation); PREP (Preparation) (preparation and reaction with methanol)

RN 172370-46-6 CAPLUS

CN Phosphorus(1+), bis(N-ethyllethanaminato)(2-methylpropyl)-, chloride, (T-4) - (9CI) (CA INDEX NAME)

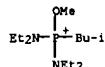


● Cl-

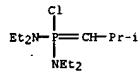
IT 163492-81-7P, RLT: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction with sodium perchlorate)

RN 163492-81-7 CAPLUS

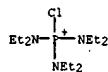
CN Phosphorus(1+), bis(N-ethyllethanaminato)methoxy(2-methylpropyl)-, chloride, (T-4) - (9CI) (CA INDEX NAME)

● Cl⁻

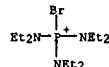
IT 110870-82-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and rearrangement of)
 RN 110870-82-1 CAPLUS
 CN Phosphoranediamine, 1-chloro-N,N,N',N'-tetraethyl-1-(2-methylpropylidene)-(9CI) (CA INDEX NAME)



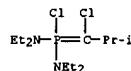
IT 17761-44-3P 73954-63-9P 122600-76-4P
 148115-72-4P 151984-71-3P 168130-34-5P
 172490-29-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 17761-44-3 CAPLUS
 CN Phosphorus(1+), chlorotris(N-ethylethanaminato)-, chloride, (T-4)- (9CI) (CA INDEX NAME)

● Cl⁻

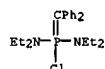
RN 73954-63-9 CAPLUS
 CN Phosphorus(1+), bromotris(N-ethylethanaminato)-, bromide, (T-4)- (9CI) (CA INDEX NAME)

● Br⁻

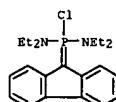
RN 122600-76-4 CAPLUS
 CN Phosphoranediamine, 1-chloro-1-(1-chloro-2-methylpropylidene)-N,N,N',N'-tetraethyl- (9CI) (CA INDEX NAME)



RN 148115-72-4 CAPLUS
 CN Phosphoranediamine, 1-chloro-1-(diphenylmethylene)-N,N,N',N'-tetraethyl- (9CI) (CA INDEX NAME)



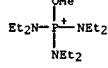
RN 151984-71-3 CAPLUS
 CN Phosphoranediamine, 1-chloro-N,N,N',N'-tetraethyl-1-(9H-fluoren-9-ylidene)- (9CI) (CA INDEX NAME)



RN 168130-34-5 CAPLUS
 CN Phosphorus(1+), tris(N-ethylethanaminato)methoxy-, (T-4)-, perchlorate (9CI) (CA INDEX NAME)



CRN 168130-33-4
 CMF C13 H33 N3 O P



CM 2

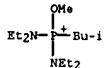
CRN 14797-73-0
 CMF C1 O4



RN 172490-29-8 CAPLUS
 CN Phosphorus(1+), bis(N-ethylethanaminato)methoxy(2-methylpropyl)-, (T-4)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 172490-28-7
 CMF C13 H32 N2 O P



CM 2

CRN 14797-73-0
 CMF C1 O4



ACCESSION NUMBER: 1995-273379 CAPLUS
 DOCUMENT NUMBER: 123:112591

TITLE: Use of Npe-protecting groups for the preparation of oligodeoxyribonucleotides without using nucleophiles during the final deprotection

AUTHOR(S): Avino, Anna Maria; Eritja, Ramon
 CORPORATE SOURCE: CID, CSIC, Barcelona, 08034, Spain
 SOURCE: Nucleosides & Nucleotides (1994), 13(10), 2059-69

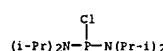
CODEN: NUNUD5; ISSN: 0732-0311

PUBLISHER: Dekker
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 123:112591

AB: The preparation of O-(4-nitrophenyl)ethyl phosphoramidites and H-phosphonate derivs. of Npe (nitrophenyl)ethyl protected nucleosides is described together with the use of these products to prepare oligodeoxyribonucleotides without using nucleophiles during the final deprotection.

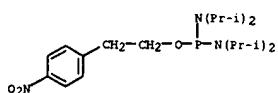
IT 56183-63-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (Herrfield synthesis of oligodeoxyribonucleotides using nitrophenylethyl protecting groups)

RN 56183-63-2 CAPLUS
 CN Phosphorodiamicidous chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)



IT 108787-34-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Herrfield synthesis of oligodeoxyribonucleotides using nitrophenylethyl protecting groups)

RN 108787-34-4 CAPLUS
 CN Phosphorodiamicidous acid, tetrakis(1-methylethyl)-, 2-(4-nitrophenyl)ethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:269228 CAPLUS

DOCUMENT NUMBER: 120:269228

TITLE: A convenient method for the transformation of

alcohols into alkyl trifluoromethyl sulfides

AUTHOR(S): Kolomeitsev, A. A.; Chabanenko, K. Yu.;

Roeschenthaler, G. V.; Yagupolskii, Yu. L.

CORPORATE SOURCE: Inst. Org. Chem., Kiev, 253660, Ukraine

SOURCE: Synthesis (1994), (2), 145-6

CODEN: SYNTBF ISSN: 0039-7881

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 120:269228

AB Alkyl trifluoromethyl sulfides RSCF₃ (R = PhCH₂, EtO₂CH₂, EtO₂CHMe) are prepared in almost quant. yields by phosphorylation of alcols. or

o-hydroxy esters ROH using (Et₂N)₂PCl, followed by reaction with

(CF₃)₂S₂ under extremely mild conditions. Ph2S₂ reacts similarly with

phosphorylated alc. (Et₂N)₂POCH₂Ph.

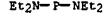
IT 685-83-6, Chlorobis(diethylamino)phosphine

RL: RCT (Reactant); RACT (Reactant or reagent)

(esterification of)

RN 685-83-6 CAPLUS

CN Phosphorodiamidous chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



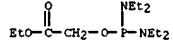
IT 154601-51-1P 154601-52-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with bis(trifluoromethyl) disulfide)

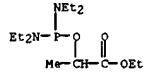
RN 154601-51-1 CAPLUS

CN Acetic acid, {[bis(diethylamino)phosphino]oxy}-, ethyl ester (9CI) (CA INDEX NAME)



RN 154601-52-2 CAPLUS

CN Propanoic acid, 2-[(bis(diethylamino)phosphino)oxy]-, ethyl ester (9CI) (CA INDEX NAME)



IT 66954-57-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with disulfides)

L6 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:107134 CAPLUS

DOCUMENT NUMBER: 120:107134

TITLE: Transformations of thiocyanocalkyl phosphites and

amidophosphites

AUTHOR(S): Nursetdinova, O. N.; Novikova, V. G.; Troitskaja, L. B.

CORPORATE SOURCE: A. E. Arbuzov Inst. Org. Phys. Chem., Kazan, 420083,

Russia

SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (1992),

(11), 2673-5

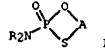
CODEN: IASKEA; ISSN: 1026-3500

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 120:107134

GI



AB Reaction of [Me₂C(CCl₃)₂]₂PCl with MeCH(OH)CH₂CH₂SCN from -10 to -15° to 20° afforded [Me₂C(CCl₃)₂]₂POCH₂CH₂CH₂SCN; heating the latter in boiling PhMe afforded quant. [Me₂C(CCl₃)₂]₂PSCH₂CH₂CH₂(CN)Me. Reaction of (MeO)₂P(NR₂)Cl (R = Me, Et) with HOASCN [A = (CH₂)₃, MeCH(CH₂)₂, MeCH₂CH₂, MeCH₂CHMe] afforded oxathiaphospholanes and -phosphorinanes I. Rearrangement reaction of (Me₂N)₂PCl with HOCHMeCHMeSCN afforded (Me₂N)₂P(O)SCMeCHMeCl.

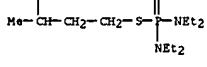
IT 150844-72-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 150844-72-7 CAPLUS

CN Phosphorodiamidothioic acid, tetraethyl-, S-(3-chlorobutyl) ester (9CI) (CA INDEX NAME)



IT 152327-69-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactions of, with amidochlorophosphites)

RN 152327-69-0 CAPLUS

CN Phosphorodiamidothioic acid, tetramethyl-, S-(2-chloro-1-methylpropyl) ester (9CI) (CA INDEX NAME)

L6 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 66954-57-2 CAPLUS

CN Phosphorodiamidous acid, tetraethyl-, phenylmethyl ester (9CI) (CA INDEX NAME)



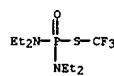
IT 154601-54-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

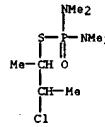
(preparation of)

RN 154601-54-4 CAPLUS

CN Phosphorodiamidothioic acid, tetraethyl-, S-(trifluoromethyl) ester (9CI) (CA INDEX NAME)



L6 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



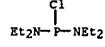
IT 685-83-6 3348-44-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(rearrangement reaction, with thiocyanato alcs.)

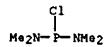
RN 685-83-6 CAPLUS

CN Phosphorodiamidous chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 3348-44-5 CAPLUS

CN Phosphorodiamidous chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



IT 152327-69-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactions of, with amidochlorophosphites)

RN 152327-69-0 CAPLUS

CN Phosphorodiamidothioic acid, tetramethyl-, S-(2-chloro-1-methylpropyl) ester (9CI) (CA INDEX NAME)

=> FIL STNGUIDE			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
FULL ESTIMATED COST	73.69	417.86	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	-7.80	-7.80	

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FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Jan 5, 2007 (20070105/UP).

=> file caplus			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
FULL ESTIMATED COST	0.30	418.16	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	0.00	-7.80	

FILE 'CAPLUS' ENTERED AT 08:48:06 ON 08 JAN 2007
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L6 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:626073 CAPLUS
DOCUMENT NUMBER: 118:226073
TITLE: Reaction of tetraethylidiamidochlorophosphite with thiocyanato alcohols
AUTHOR(S): Nuratdinova, O. N.; Novikova, V. G.
CORPORATE SOURCE: A. E. Arbuzov Inst. Org. Phys. Chem., Kazan, 420083, Russia
SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (1992), (11), 2678-80
CODEN: IASKEA; ISSN: 1026-3500

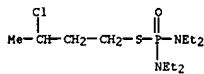
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 119:226073

AB Reaction of (Et₂N)₂PCl with MeCH(OH)CH₂CH₂SCN in Et₂O containing Et₃N at low temperature (-30° to -35°) gave (Et₂N)₂PCN. Treating the latter with S or Se in PhMe gave (Et₂N)₂P(X)CN (X = S, Se), resp.

IT 150844-72-7
RL: PREP (Preparation)
(formation and phosphorus-31 NMR of)

RN 150844-72-7 CAPLUS

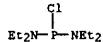
CN Phosphorodiamidic acid, tetraethyl-, S-(3-chlorobutyl) ester (9CI) (CA INDEX NAME)



IT 685-83-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with thiocyanobutanol)

RN 685-83-6 CAPLUS

CN Phosphorodiamidic chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L6 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:192248 CAPLUS
DOCUMENT NUMBER: 118:192248
TITLE: Synthesis and phosphorylating properties of hydroxymanno acid phosphoramidites
AUTHOR(S): Dreef-Tromp, C. M.; Lefebvre, A. W. M.; Van der Marel, G. A.; Van Boom, J. H.
CORPORATE SOURCE: Gorlaeus Lab., Leiden, 2300 RA, Neth.
SOURCE: Synthesis (1992), (12), 1269-72
CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:192248

AB The preparation of protected amino ester phosphoramidites PhCH₂O₂C-X(P(OCH₂Ph)N(CHMe₂)₂)-OCH₂Ph (I: X = Ser, Thr, Tyr, hydroxyproline) using the versatile phosphorylating reagent PhCH₂O₂P(N(CHMe₂)₂)₂ is described.

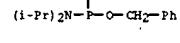
The application of phosphoramidites I is illustrated in the synthesis of several phosphate diesters.

IT 108549-21-9P, Benzyloxybis(diisopropylamino)phosphine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and phosphorylation by, of protected hydroxy amino acid side chains)

RN 108549-21-9 CAPLUS

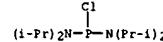
CN Phosphorodiamidic acid, tetrakis(1-methylethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



IT 56183-63-2, Chlorobis(N,N-diisopropyl)phosphoramidite
RL: PROC (Process)
(substitution of, with benzyl alc.)

RN 56183-63-2 CAPLUS

CN Phosphorodiamidic chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:22543 CAPLUS
DOCUMENT NUMBER: 118:22543
TITLE: Preparation of intermediates for glycosylphosphatidylinositol anchors
INVENTOR(S): Ogawa, Tomoya; Muragata, Tautomu; Saito, Hiromitsu
PATENT ASSIGNEE(S): Institute of Physical and Chemical Research, Japan; Kyowa Hakko Kogyo Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JOKKAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04120089	A	19920421	JP 1990-240960	19900911
PRIORITY APPLN. INFO.:			JP 1990-240960	19900911

GI

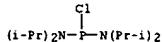
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title intermediates, e.g. I and II, are prepared. E.g., I was prepared in 4 steps from the protected hexopyranose diacetate III via reaction with p-MeOCH₂OH in methylene chloride containing CF₃SO₃SiMe₃, hydrolysis, reaction with benzyl alc., ClP(N(CHMe₂)₂)₂, and HOCH₂CH₂NHCO₂CH₂Ph, and debenzylation.

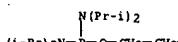
IT 56183-63-2 102691-36-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of intermediates for glycosylphosphatidylinositol anchors)

RN 56183-63-2 CAPLUS

CN Phosphorodiamidic chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)

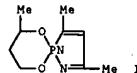


RN 102691-36-1 CAPLUS
CN Phosphorodiamidic acid, tetrakis(1-methylethyl)-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:492391 CAPLUS
DOCUMENT NUMBER: 115:92391
TITLE: Trivalent phosphorus acid pyrazolides
AUTHOR(S): Iorish, V. Yu.; Grachev, M. K.; Bekker, A. R.; Nifant'ev, E. A.
CORPORATE SOURCE: Mosk. Gos. Pedagog. Inst., Moscow, USSR
SOURCE: Zhurnal Obshchey Khimii (1991), 61(1), 106-14
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 115:92391
GI

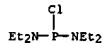


AB Phosphorylation of pyrazoles was accomplished by several methods, e.g., by reaction with 2-chloro-1,3,2-dioxaphosphorinanes. The phosphorylating ability of the phosphorylated pyrazoles could be enhanced by amine hydrochloride or HBF₄. In pyrazole I, the pyrazole ring preferred the same orientation.

IT 685-43-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(phosphorylation by, of pyrazoles)

RN 685-43-6 CAPLUS

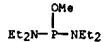
CN Phosphorodiamidic chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



IT 30463-72-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 30463-72-0 CAPLUS

CN Phosphorodiamidic acid, tetraethyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



L6 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:429465 CAPLUS

DOCUMENT NUMBER: 115:29465

TITLE: 1,3,225-Benzothiazaphosphole 2-oxide and 1,3,225-benzothiazaphosphole 2-oxide derivatives, new and versatile phosphorylating reagents

AUTHOR(S): Jacob, Peter; Richter, Wolfgang; Ugi, Ivar
CORPORATE SOURCE: Org. Chem. Inst., Tech. Univ. Muenchen, Garching, D-8046, Germany

SOURCE: Liebigs Annalen der Chemie (1991), (6), 519-22

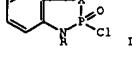
DOCUMENT TYPE: CODEN: LACHDL; ISSN: 0170-2041

JOURNAL: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:29465

GI



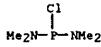
AB The synthesis of the highly reactive five-membered cyclic phosphorylating reagents I (R = Me, X = S; R = SO₂Me, X = O) is described. The former monophosphorylates alcs. without ring opening, whereas the latter diphosphorylates with ring opening yielding phosphate triesters.

IT 3348-44-5 17166-16-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation reaction of, with aminothiophenol)

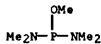
RN 3348-44-5 CAPLUS

CN Phosphorodiamidous chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 17166-16-4 CAPLUS

CN Phosphorodiamidous acid, tetramethyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



L6 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:56485 CAPLUS

DOCUMENT NUMBER: 112:56485

TITLE: Synthesis of 1-O-(1,2-di-O-palmitoyl-sn-glycero-3-phosphoryl)-2-O- α -D-mannopyranosyl-D-myo-inositol: a fragment of mycobacterial phospholipids

AUTHOR(S): Elie, C. J. J.; Dreef, C. E.; Verduyn, R.; Van der Marel, G. A.; Van Boom, J. H.

CORPORATE SOURCE: Gorlaeus Lab., Leiden, 2300 RA, Neth.

SOURCE: Tetrahedron (1989), 45(11), 3477-86

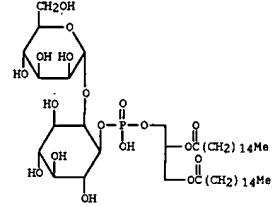
DOCUMENT TYPE: CODEN: TETRAB; ISSN: 0040-4020

JOURNAL: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:56485

GI



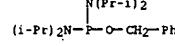
AB Optically active and partially benzylated 2-O-(α -D-mannopyranosyl)-D-myo-inositol was coupled, via a trivalent phosphorus method, with 1,2-di-O-palmitoyl-sn-glycerol. Oxidation of the intermediate phosphate-triester, and subsequent removal of the P(V)- and O-benzyl protecting groups, afforded the chiral title compound I.

IT 108549-21-9

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with di-O-palmitoylglycerol)

RN 108549-21-9 CAPLUS

CN Phosphorodiamidous acid, tetrakis(1-methylethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

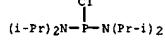


IT 56183-63-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with benzyl alc.)

RN 56183-63-2 CAPLUS

CN Phosphorodiamidous chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
NAME)



L6 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:57225 CAPLUS

DOCUMENT NUMBER: 110:57225

TITLE: Preparation of alkyl aryl ethers and thio ethers
AUTHOR(S): Downie, Ian M.; Heaney, Harry; Kemp, Graham
CORPORATE SOURCE: Dep. Chem., Univ. Technol., Leicestershire, LE11 3TU, UK

SOURCE: Tetrahedron (1988), 44(9), 2619-24
DOCUMENT TYPE: CODEN: TETRAB; ISSN: 0040-4020

JOURNAL: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 110:57225

AB Stable alkoxyporphonium salts, ROP+(NMe₂)₃PF₆-(I; R = MeOC₂H₅, Pr, allyl, PhCH₂, H(C₂H₅)C₂Me), were prepared and treated with phenols and thiophenols under basic conditions, to yield the corresponding alkyl aryl ethers and sulfides, resp. E.g., I [R = H(C₂H₅)C₂Me] reacted with PhOH and PhSH in Me₂NCHO containing KOH to give 90% ROPh and 61% RSPh, resp.

IT 54739-05-8

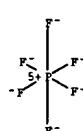
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and etherification and sulfenylation of, with phenol and thiophenol)

RN 54739-05-8 CAPLUS

CN Phosphorus(1+), tris(N-methylmethanaminato)(2-propen-1-olato)-, (T-4)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)



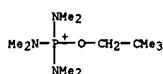
CRN 16919-18-9
CHF F6 P
CC1 CCS



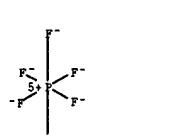
IT 54739-01-4P 54739-03-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and etherification of, with aromatic alcs.)

L6 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RN 54739-01-4 CAPLUS
 CN Phosphorus(1+), (2,2-dimethyl-1-propanolato)tris(N-methylmethanaminato)-, (T-4)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1
 CRN 54739-00-3
 CMF C11 H29 N3 O P

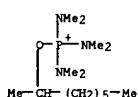


CM 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



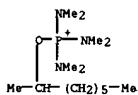
RN 54739-03-6 CAPLUS
 CN Phosphorus(1+), tris(N-methylmethanaminato)(2-octanolato)-, (T-4)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1
 CRN 54739-02-5
 CMF C14 H35 N3 O P

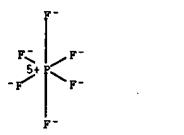


CM 2
 CRN 16919-18-9
 CMF F6 P

L6 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RN 63640-67-5
 CMF C14 H35 N3 O P

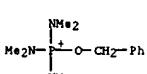


CM 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



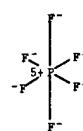
IT 54774-06-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and sulfenylation of, with thiophenols)
 RN 54774-06-0 CAPLUS
 CN Phosphorus(1+), (benzenemethanolato)tris(N-methylmethanaminato)-, (T-4)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1
 CRN 46852-57-7
 CMF C13 H25 N3 O P



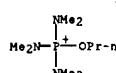
CM 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS

L6 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 CCI CCS

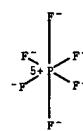


IT 118527-13-2P 118527-15-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and etherification of, with phenol)
 RN 118527-13-2 CAPLUS
 CN Phosphorus(1+), tris(N-methylmethanaminato)propoxy-, (T-4)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1
 CRN 118527-12-1
 CMF C9 H25 N3 O P



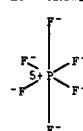
CM 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



RN 118527-15-4 CAPLUS
 CN Phosphorus(1+), tris(N-methylmethanaminato)(2-octanolato)-, [T-4-(R)]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

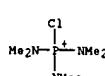
CM 1

L6 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

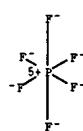


IT 73421-39-3P 118527-19-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 73421-39-3 CAPLUS
 CN Phosphorus(1+), chlorotris(N-methylmethanaminato)-, (T-4)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

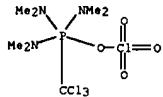
CM 1
 CRN 32803-80-8
 CMF C6 H18 Cl N3 P



CM 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS

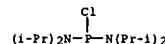


RN 118527-19-8 CAPLUS
 CN Phosphoranimine, N,N,N',N',N'',N''-hexamethyl-1-(perchloryloxy)-1-(trichloromethyl)- (9CI) (CA INDEX NAME)

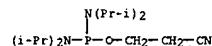


L6 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1988:549797 CAPLUS
 DOCUMENT NUMBER: 109:149797
 TITLE: Phosphorodiamidic acid ester derivatives
 INVENTOR(S): Tawara, Shinichiro; Goto, Kuniaki; Hayakawa, Yoshihiro
 PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

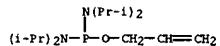
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62212395	A	19870918	JP 1986-53305	19860311
PRIORITY(APPLN. INFO.): JP 62212395 A 19870918 JP 1986-53305 19860311				
AB	R3OP(NR1R2)2 (I; R1, R2 = secondary or tertiary alkyl; NR1R2 may be a ring; R30 = OH-derived protective group), useful in polynucleotide synthesis, are prepared by amination of PX3 (X = halo) and treating the resultant XP(NR1R2)2 with R3OH. Thus, stirring 28.6 mmol PC13 with 114.4 mmol diisopropylamine in Et2O at room temperature for 20 h gave 70% [(Me2CH)2N]2PCl, 20 mmol of which was stirred with 20 mmol Et3N and 20 mmol allyl alc. in Et2O at room temperature for 15 h to give 47% I (R1 = R2 = Me2CH, R3 = allyl).			
IT	56183-63-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)			
RN	56183-63-2 CAPLUS			
CN	Phosphorodiamidic chloride, tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)			



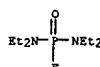
IT 102691-36-1P 108554-72-9P, Allyloxybis(N,N-dimethylamino)phosphine
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as synthetic reagent for polynucleotide synthesis)
 RN 102691-36-1 CAPLUS
 CN Phosphorodiamidic acid, tetrakis(1-methylethyl)-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



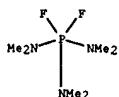
RN 108554-72-9 CAPLUS
 CN Phosphorodiamidic acid, tetrakis(1-methylethyl)-, 2-propenyl ester (9CI) (CA INDEX NAME)



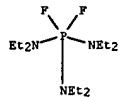
L6 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1986:591237 CAPLUS
 DOCUMENT NUMBER: 105:191237
 TITLE: Reaction of the two-component systems P(OR)3-x(NR2)x(x = 0-3)/CCl4 and P4/CCl4 with HF-donors
 AUTHOR(S): Riesel, L.; Kant, M.
 CORPORATE SOURCE: Sekt. Chem., Humboldt-Univ., Berlin, DDR-1040, Ger.
 SOURCE: Dem. Rep.
 Zeitschrift fuer Anorganische und Allgemeine Chemie
 (1986), 531, 73-81
 CODEN: ZAACAB; ISSN: 0044-2313
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 AB The combination of organoammonium fluorides and CCl4 is a good agent for oxidative fluorination of trivalent phosphorus compds. Oxidation products [(RO)PF5]- and (RO)2P(O)F are obtained from P(OR)3-x(Et2N)2P(O)F and (Et2N)2P(EtO)PF2 are obtained from P(OEt)(NEt2)2, and (Et2N)3PF2 and [(Et2N)3PF2]- are obtained from P(NEt2)3. In the system P2NH/CCl4/Et3N-nHF, P4 is oxidized forming [HPF5]-, R2NH-PF5 and (R2NH)2P(O)F. In the case of simultaneous addition of alcs., [(RO)PF5]-, (RO)3PO and (R2NH)2P(O)F are formed. The reactions are controlled by the nucleophilicity, the concentration of fluoride, the acidity of the system, and the temperature.
 IT 562-17-4P 7549-83-9P 32318-29-9P
 81193-87-5P 104475-64-1P 104494-43-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 562-17-4 CAPLUS
 CN Phosphorodiamidic fluoride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



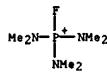
RN 7549-83-9 CAPLUS
 CN Phosphorotetramine, 1,1-difluoro-N,N,N',N'',N'',N'''-hexamethyl- (9CI) (CA INDEX NAME)



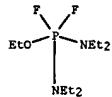
RN 32318-29-9 CAPLUS
 CN Phosphorotetramine, N,N,N',N'',N'',N'''-hexaethyl-1,1-difluoro-, (TB-5-11)- (9CI) (CA INDEX NAME)



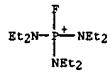
RN 81193-87-5 CAPLUS
 CN Phosphorus(1+), fluorotris(N-methylmethanaminato)-, (T-4)- (9CI) (CA INDEX NAME)



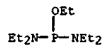
RN 104475-64-1 CAPLUS
 CN Phosphorodiamidate, 1-ethoxy-N,N,N',N'-tetraethyl-1,1-difluoro- (9CI) (CA INDEX NAME)



RN 104494-43-1 CAPLUS
 CN Phosphorus(1+), tris(N-ethylethanaminato)fluoro-, (T-4)- (9CI) (CA INDEX NAME)



IT 2632-88-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with hydrogen fluoride generators)
 RN 2632-88-4 CAPLUS
 CN Phosphorodiamidate, tetraethyl-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)

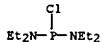


L6 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1986:497579 CAPLUS
 DOCUMENT NUMBER: 105:97579
 TITLE: Thermal instability of some alkyl phosphorodiamidites
 AUTHOR(S): Nielsen, John; Marugg, John E.; Van Boom, Jacques H.;
 Honnens, Jeanne; Taagaard, Michael; Dahl, Otto
 CORPORATE SOURCE: Dep. Gen. Org. Chem., Univ. Copenhagen, Copenhagen, DK-2100, Den.
 SOURCE: Journal of Chemical Research, Synopses (1986), (1), 26-7
 CODEN: JRPSCD; ISSN: 0308-2342

DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 105:97579
 AB The phosphorodiamidites ROP(NR'2)2 [R = (CH2)2CN, R' = Et (I), CHMe2; R = CHMeCH2CN, R' = Et; R = CMe2CH2CN, R' = Et, CHMe2; R = (CH2)2SO2Me, R' = Et (II), CHMe2 (III)], promising reagents for the in situ preparation of deoxyribonucleoside phosphoramides, were prepared in 45-50% yield either by condensation of Et2NSiMe3 with alkyl phosphorodichlorides or of (R'2N)2PCL with ROH. Except for I-III, the phosphorodiamidites were thermally stable. I-III decomposed at, or below, room temperature I and II gave

R2(CH2)2P(O)(NET2)2 (R2 = CN, SO2Me) in 65 and 96% yield, resp; the mechanism involves an initiation step to form R2CH2CH2 (IV) and HP(O)(NET2)2 followed by a rearrangement cycle in which IV acts as a catalyst. Alkyl phosphorodiamidites with alkoxy groups capable of β -elimination are inherently thermally unstable but their propensity to rearrange to alkylphosphonic diamides is inhibited by bulky substituents.

IT 685-83-6 56183-63-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation reactions of, with alcs.)
 RN 685-83-6 CAPLUS
 CN Phosphorodiamidate, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

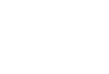


RN 56183-63-2 CAPLUS
 CN Phosphorodiamidate, tetraakis(1-methylethyl)- (9CI) (CA INDEX NAME)

IT 103930-67-2P 103930-71-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and rearrangement of, mechanism of)
 RN 103930-67-2 CAPLUS
 CN Phosphorodiamidate, tetraethyl-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



RN 103930-71-8 CAPLUS
 CN Phosphorodiamidate, tetraethyl-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



RN 103930-72-9 CAPLUS
 CN Phosphorodiamidate, tetraethyl-, 2-(methylsulfonyl)ethyl ester (9CI) (CA INDEX NAME)



IT 103930-72-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and stability of)

RN 103930-72-9 CAPLUS

CN Phosphorodiamidate, tetraethyl-, 2-(methylsulfonyl)ethyl ester (9CI) (CA INDEX NAME)



IT 103930-72-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and stability of)

RN 103930-72-9 CAPLUS

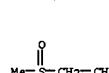
CN Phosphorodiamidate, tetraethyl-, 2-(methylsulfonyl)ethyl ester (9CI) (CA INDEX NAME)



IT 103930-72-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and stability of)

RN 103930-72-9 CAPLUS

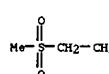
CN Phosphorodiamidate, tetraethyl-, 2-(methylsulfonyl)ethyl ester (9CI) (CA INDEX NAME)



IT 103930-72-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and stability of)

RN 103930-72-9 CAPLUS

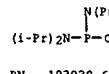
CN Phosphorodiamidate, tetraethyl-, 2-(methylsulfonyl)ethyl ester (9CI) (CA INDEX NAME)



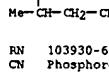
IT 102691-36-1P 103930-68-3P 103930-69-4P
 103930-70-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 102691-36-1 CAPLUS

CN Phosphorodiamidate, tetraethyl-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)

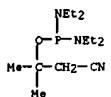


IT 103930-68-3 CAPLUS
 CN Phosphorodiamidate, tetraethyl-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)

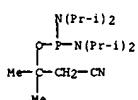


RN 103930-69-4 CAPLUS

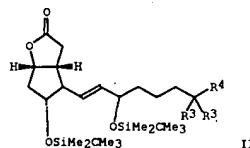
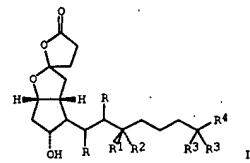
CN Phosphorodiamidate, tetraethyl-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



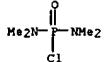
RN 103930-70-7 CAPLUS
CN Phosphorodiamidous acid, tetrakis(1-methylethyl)-, 2-cyano-1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



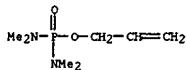
L6 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:438705 CAPLUS
DOCUMENT NUMBER: 97:38705
TITLE: The synthesis of 2,3-dinorprostacyclin metabolites: a new approach to spirolactone hemiacetals
AUTHOR(S): Bundy, G. L.; Lin, C. H.; Sih, J. C.
CORPORATE SOURCE: Emp. Chem. Res., Upjohn Co., Kalamazoo, MI, 49001, USA
SOURCE: Tetrahedron (1981), 37(25), 4419-29
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB The major human urinary metabolites of prostacyclin and 6-oxo-PGF₁_a were prepared by a direct route involving C3 homologation of bicyclic lactone intermediates and spontaneous spirolactonization of the products. The fact that these 2,3-dinor-6-oxo metabolites exist almost exclusively as spirolactone hemiacetals at pH < 5 may explain the reported difficulties in derivatizing samples of biol. origin. The metabolites I (R₂ = bond, R₁ = H, R₂ = OH; R₁R₂ = O; R = H, R₁R₂ = O; R₃ = H, R₄ = Me; R₃ = D, R₄ = CH(O₂H)) were prepared from bicyclic lactones II (same R₃, R₄) by treatment with (Me₂N)₂P(O)(O-CH₂CH₂CH₂-2Li⁺ at -25° followed by mild acidification and desilylation and, if necessary, oxidation I (R = R₃ = H, R₁R₂ = O, R₄ = CO₂H) was prepared similarly.
IT 1605-65-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with allyl alc.)
RN 1605-65-8 CAPLUS
CN Phosphorodiamidic chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

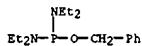


IT 50775-60-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotonation of)
RN 50775-60-5 CAPLUS
CN Phosphorodiamidic acid, tetramethyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

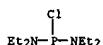


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L6 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1982:122835 CAPLUS
 DOCUMENT NUMBER: 96:122835
 TITLE: Migratory capability of the substituent X in the R2(XO)P=N-P(O)R2 system
 AUTHOR(S): Zaslavskaya, N. N.; Gil'yarov, V. A.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
 SOURCE: Khim. Primen. Fosfororg. Soedin., Tr. Yubileinoi Konf., 6th (1981), Meeting Date 1977, 274-81.
 Editor(s): Kirsanov, A. V. Izd. Naukova Dumka: Kiev, USSR.
 CODEN: 47ETAA
 DOCUMENT TYPE: Conference; General Review
 LANGUAGE: Russian
 AB A review, with 11 refs., including the preparation of (MeO)2P(OEt)2(OMe3), (CH2=CHCH2O)(EtO)2NP(O)(OEt)2, Et2(PHCH2O)2NP(O)(Net2)2 and (Et2N)2POCH2Ph.
 IT 66954-57-2
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with di-Et azidophosphate)
 RN 66954-57-2 CAPLUS
 CN Phosphorodiamidous acid, tetraethyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

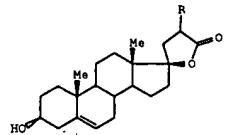


IT 685-83-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with benzyl alc.)
 RN 685-83-6 CAPLUS
 CN Phosphorodiamidous chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

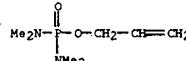


L6 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 ACCESSION NUMBER: 1982:122835 CAPLUS
 DOCUMENT NUMBER: 96:122835
 TITLE: Migratory capability of the substituent X in the R2(XO)P=N-P(O)R2 system
 AUTHOR(S): Zaslavskaya, N. N.; Gil'yarov, V. A.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
 SOURCE: Khim. Primen. Fosfororg. Soedin., Tr. Yubileinoi Konf., 6th (1981), Meeting Date 1977, 274-81.
 Editor(s): Kirsanov, A. V. Izd. Naukova Dumka: Kiev, USSR.
 CODEN: 47ETAA
 DOCUMENT TYPE: Conference; General Review
 LANGUAGE: Russian
 AB A review, with 11 refs., including the preparation of (MeO)2P(OEt)2(OMe3), (CH2=CHCH2O)(EtO)2NP(O)(OEt)2, Et2(PHCH2O)2NP(O)(Net2)2 and (Et2N)2POCH2Ph.
 IT 66954-57-2
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with di-Et azidophosphate)
 RN 66954-57-2 CAPLUS
 CN Phosphorodiamidous acid, tetraethyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

L6 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1980:568476 CAPLUS
 DOCUMENT NUMBER: 93:168476
 TITLE: Lactonization at the 17 β -position of steroids
 AUTHOR(S): Sturtz, Georges; Yaouanc, Jean Jacques; Krausz, Francois; Labeeuw, Bernard
 CORPORATE SOURCE: Lab. Chim. Hetero Org., Fac. Sci. Tech., Brest, F-29283, Fr.
 SOURCE: Synthesis (1980), (4), 289-91
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 93:168476
 GI

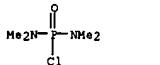


AB Andrenolactone (I; R = H) and its methyl homolog (I; R = Me) were prepared by reaction of the O-tetrahydropyranyl derivative of 3 β -hydroxy-17 α -oxoandrost-5-ene with (Me2N)2P(O)CH(O-)-CH2C(=O)-CH2-2Li+ (II). Best results were obtained when the reaction was carried out in the presence of agents which solvate the Li cation such as Me2NCH2CH2NM2, 1,4-diazabicyclo[2.2.2]octane, or a suitable crown ether. II were prepared by treatment of (Me2N)2P(O)CH2C(=O)-CH2 with 2 equiv BuLi.
 IT 50775-60-5P 58998-14-4
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with butyllithium and androstenone)
 RN 50775-60-5 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

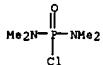


RN 58998-14-4 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-methyl-2-propenyl ester (9CI) (CA INDEX NAME)

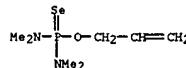
IT 1605-65-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with allyl alc. and with methallyl alc.)
 RN 1605-65-8 CAPLUS
 CN Phosphorodiamidic chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



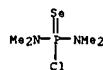
IT 1605-65-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with allyl alc. and with methallyl alc.)
 RN 1605-65-8 CAPLUS
 CN Phosphorodiamidic chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L6 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1978:442308 CAPLUS
 DOCUMENT NUMBER: 89:42308
 TITLE: Synthesis and isomerization of allyl esters of selenonic acids of phosphorus
 AUTHOR(S): Nuretdinov, I. A.; Buina, N. A.; Bayandina, E. V.; Loginova, E. I.; Gainullina, R. G.
 CORPORATE SOURCE: Inst. Org. Fiz. Khim. im. Arbuzova, Kazan, USSR
 SOURCE: Zhurnal Obshchey Khimii (1978), 48(3), 547-51
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB RRIp(Se)Cl (R = R1 = PhO, Me2N; R = PhO, R1 = Et2N) reacted with allyl alc. in CS6H6 containing Et3N at 10-12° to give RRIp(Se)OCH2CH:CH2 (I), which isomerized to RRIp(Se)SeCH2CH:CH2 on distillation in vacuo. C12POCH2CH:CH2 reacted with R2OH (R2 = Me, Et) and Se in petroleum ether containing Et3N at -5° to give 68.0-9.6% (R2)2P(Se)OCH2CH:CH2, which isomerized in a sealed ampul on a steam bath to give 69.6-70.0% (R2)2P(Se)SeCH2CH:CH2. I (R = BuO, R1 = Et2N; R = Et, R1 = Et, EtO) were prepared analogously. Isomerization mechanisms were discussed. The reactivity of I toward isomerization decreased in the order of RRIp(Se)OCH2CH:CH2 > diethoxy > (PhO)(Et2N) > Et(EtO) > (BuO)(Et2N) > Et2N.
 IT 58722-80-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and isomerization of)
 RN 58722-80-8 CAPLUS
 CN Phosphorodiamidoselenoic acid, tetramethyl-, O-2-propenyl ester (9CI) (CA INDEX NAME)



IT 25408-76-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with allyl alc.)
 RN 25408-76-8 CAPLUS
 CN Phosphorodiamidoselenoic chloride, tetramethyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1978:405919 CAPLUS

DOCUMENT NUMBER: 89:5919

TITLE: Phosphoric acid amides, -esteramides, and -esters and

phosphonium compounds by direct synthesis from

elementary phosphorus

INVENTOR(S): Hoffmann, Klaus Dieter; Lehmann, Bodo; Lehmann, Hans

Albert; Riesel, Lothar; Schumann, Kurt

PATENT ASSIGNEE(S): Ger. Dem. Rep.

SOURCE: Ger. (East), 8 pp.

CODEN: GEXXAB

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 127187	A1	19770907	DD 1974-181729	19741016
PRIORITY APPLN. INFO.:		DD 1974-181729 A1 19741016		
AB	(R1R2N)3-P(O)(OR3)n (R1, R2 = H, alkyl; R3 = alkyl, H; n = 0-3) were prepared from P and R1R2NH in the presence of H2O-alkanol and [P(NR1R2)4]X (R1, R2 as above, X = Cl, Br, I) from P and R1R2NH in the absence of H2O or alc. (7 compds. prepared). Thus, stirring 0.1 mol white P with 1 mol CC14, 0.8 mol HNEt2, and 1.0 mol EtOH 8 h at 25° gave 50% (Et2N)2P(O)OEt, 17-20% (Et2O)3PO, 15% (Et2N)3PO, and 12% Et2NP(O)(OEt)2. Passing a stream of HNEt2 over a mixture of 0.1 mol white P in 1.5 mol CC14 3 h at 75° gave 90% (Me2N)4P+Cl-.			

IT 66647-64-1P

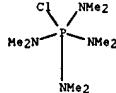
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, from phosphorus and dimethylamine)

RN 66647-64-1 CAPLUS

CN Phosphoranetetramine, 1-chloro-N,N,N',N'',N'',N''',N''''-octamethyl-

(9CI) (CA INDEX NAME)



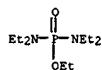
IT 3644-89-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, from phosphorus, diethylamine, and ethanol)

RN 3644-89-1 CAPLUS

CN Phosphorodiamic acid, tetraethyl-, ethyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1977:467788 CAPLUS

DOCUMENT NUMBER: 87:67788

TITLE: Reactions of keto alcohols with organophosphorus compounds. 8. Reaction of β -keto alcohols with amidophosphorous acid chlorides

AUTHOR(S): Mukhametov, F. S.; Stepashkina, L. V.; Rizpolozhenskii, N. I.

CORPORATE SOURCE: Inst.-Org. Fiz. Khim. im. Arbuzova, Kazan, USSR

SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1977), (5), 1134-8

DOCUMENT TYPE: CODEN: IASKA6; ISSN: 0002-3353

LANGUAGE: Russian

AB Treating RR1PCl (R = MeO, Me2CHO, BuO, Me2CHCH2O, EtCHMeO, C7H15O, C13CMe2O, Et, R1 = Et2N; R = R1 = Me2N, Et2N, Bu2N, (Me2CHCH2)2N) with HOCR2MeCH2COMe (R2 = H, Me) in the presence of Et3N gave 13-43.2-86.1% RR1P(S)OCR2MeCH2COMe. I (R = MeO, R1 Et2N, R2 = Me) decomposed on standing to give MeO(Et2N)p(O)H and Me2C:CHCOMe. The presence of the amide group in I inhibits their isomerization to the resp. phosphonates.

IT 63616-49-9P 63616-49-9P 63616-51-3P

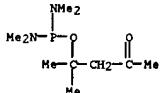
63616-52-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with sulfur)

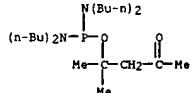
RN 63616-48-8 CAPLUS

CN Phosphorodiamic acid, tetramethyl-, 1,1-dimethyl-3-oxobutyl ester (9CI) (CA INDEX NAME)



RN 63616-49-9 CAPLUS

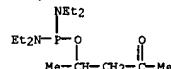
CN Phosphorodiamic acid, tetramethyl-, 1,1-dimethyl-3-oxobutyl ester (9CI) (CA INDEX NAME)



RN 63616-51-3 CAPLUS

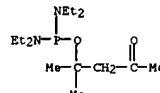
CN Phosphorodiamic acid, tetraethyl-, 1-methyl-3-oxobutyl ester (9CI) (CA INDEX NAME)

L6 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 63616-52-4 CAPLUS

CN Phosphorodiamic acid, tetraethyl-, 1,1-dimethyl-3-oxobutyl ester (9CI) (CA INDEX NAME)



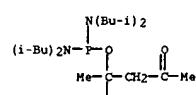
IT 63616-53-5P 63616-56-8P 63616-57-9P

63616-58-0P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

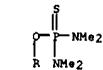
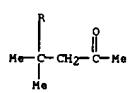
CN CAPLUS

CN Phosphorodiamic acid, tetraethyl-, 1,1-dimethyl-3-oxobutyl ester (9CI) (CA INDEX NAME)

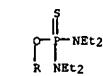
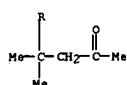


RN 63616-56-8 CAPLUS

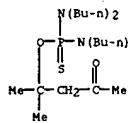
CN Phosphorodiamic acid, tetraethyl-, 1,1-dimethyl-3-oxobutyl ester (9CI) (CA INDEX NAME)



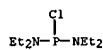
L6 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RN 63616-57-9 CAPLUS
 CN Phosphorodiamidothioic acid, tetraethyl-, O-(1,1-dimethyl-3-oxobutyl) ester (9CI) (CA INDEX NAME)



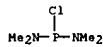
RN 63616-58-0 CAPLUS
 CN Phosphorodiamidothioic acid, tetrabutyl-, O-(1,1-dimethyl-3-oxobutyl) ester (9CI) (CA INDEX NAME)



IT 685-83-6 3348-44-5 32597-22-1
 63616-14-8 63616-59-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with diacetone alc.)
 RN 685-83-6 CAPLUS
 CN Phosphorodiamidous chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



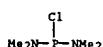
RN 3348-44-5 CAPLUS
 CN Phosphorodiamidous chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



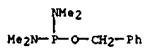
RN 32597-22-1 CAPLUS

L6 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN,
 ACCESSION NUMBER: 1975-563734 CAPLUS
 DOCUMENT NUMBER: 83:163734
 TITLE: Phosphorodiamides as synthetic intermediates in the preparation of diphenylacetylenes
 AUTHOR(S): Hargis, J. Howard; Alley, W. Del
 CORPORATE SOURCE: Dep. Chem., Auburn Univ., Auburn, AL, USA
 SOURCE: Journal of the Chemical Society, Chemical Communications (1975), (15), 612-13
 CODEN: JCCCAT; ISSN: 0022-4936
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB: Addition of PCl3 to P(NMe2)3 gave ClP(NMe2)2, which on condensation with p-RC6H4CH2OH (R = H, OH, Cl, F) gave the corresponding p-RC6H4CH2OP(NMe2)2 (I). Reaction of I with PhCCl3 gave (Me2N)2P(O)Cl and the corresponding p-RC6H4CH2CCl2Ph (II). Reaction of II with KOH-EtOH caused dehydrochlorination and formation of the corresponding alkynes, p-RC6H4C triple bond Ph. The mechanism postulated for the reaction between I and polyhalogenated compds. was supported by kinetic data obtained from the reactions of II with PhCCl3. Second-order kinetics were observed and a Hammett plot of these data gave a neg. ρ value in accordance with the rate determining nucleophilic attack of I on the halogen of PhCCl3, followed by rapid dealkylation of the phosphonium ion. The intermediacy of a polyhalogenated anion was supported by trapping of the CC13 anion as CHCl3 when II (X = H) was treated with CC14 in the presence of a proton donor e.g. MeOH.
 IT 3348-44-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and condensation reaction with benzyl alcs.)

IT 3348-44-5 CAPLUS
 CN Phosphorodiamidous chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

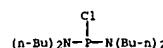


IT 53617-91-7P 57365-29-4P 57365-30-7P
 57365-31-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with benzotrichloride, kinetics of)
 RN 53617-91-7 CAPLUS
 CN Phosphorodiamidous acid, tetramethyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

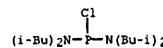


RN 57365-29-4 CAPLUS
 CN Phosphorodiamidous acid, tetramethyl-, (4-chlorophenyl)methyl ester (9CI) (CA INDEX NAME)

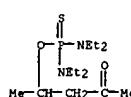
L6 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 CN Phosphorodiamidous chloride, tetrabutyl- (8CI, 9CI) (CA INDEX NAME)



RN 63616-14-8 CAPLUS
 CN Phosphorodiamidous chloride, tetrakis(2-methylpropyl)- (9CI) (CA INDEX NAME)

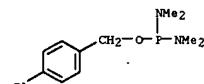


RN 63616-59-1 CAPLUS
 CN Phosphorodiamidothioic acid, tetraethyl-, O-(1-methyl-3-oxobutyl) ester (9CI) (CA INDEX NAME)

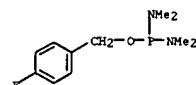


RN 63616-59-1 CAPLUS
 CN Phosphorodiamidothioic acid, tetraethyl-, O-(1-methyl-3-oxobutyl) ester (9CI) (CA INDEX NAME)

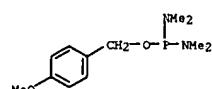
L6 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 57365-30-7 CAPLUS
 CN Phosphorodiamidous acid, tetramethyl-, (4-fluorophenyl)methyl ester (9CI) (CA INDEX NAME)



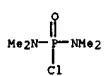
RN 57365-31-8 CAPLUS
 CN Phosphorodiamidous acid, tetramethyl-, (4-methoxyphenyl)methyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1975-478638 CAPLUS
 DOCUMENT NUMBER: 6378638
 TITLE: Propargylic phosphorodiamides
 INVENTOR(S): Sturtz, Georges; Corbel, Bernard; Paugan, Jean P.; Vuilleroy de Silly, Patrick
 PATENT ASSIGNEE(S): Agence Nationale de Valorisation de la Recherche, Fr.
 SOURCE: Fr. Demande, 16 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2236871	A1	19750207	FR 1973-25634	19730712
FR 2236871	B1	19760618		

PRIORITY APPLN. INFO.: FR 1973-25634 A 19730712
 AB (R2N)2P(0)CH2C.tplbond.CR1 (R2N = Me2N, Et2N, Bu2N, 1-aziridinyl 1-pyrrolidinyl, piperidino, or morpholino; R1 = H) were prepared in 54-89% yield by reaction of C12P(0)OCH2C.tplbond.CH with R2NH, and these products were alkylated with MeI and with n-CSH11 to give (R2N)2P(0)CH2C.tplbond.CR1 (R2N = same meaning, R1 = Me or n-CSH11) in 50-95% yield. (Me2N)2P(0)OCH2C.tplbond.CR (R = Et, Pr, or Bu) were similarly prepared in 59-77% yield. (Me2N)2P(0)OCH2C.tplbond.CH also reacted with BuLi and R2CO to give 51-67% (Me2N)2P(0)OCH2C.tplbond.CCR2OH (R = Me or Cl, or R2 = cyclopentyl, cyclohexyl, or 2-bornyl).
 IT 1605-65-8
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (manufacture and esterification of, with acetyllinic alcoh.)
 RN 1605-65-8 CAPLUS
 CN Phosphorodiamidic chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



IT 53799-85-2P 53799-88-5P 53799-89-6P
 53799-90-9P 53799-91-0P 53799-92-1P
 56305-14-7P 56305-15-8P 56305-20-5P
 56305-21-6P 56305-22-7P 56305-23-8P
 56305-30-7P 56305-31-8P 56305-32-9P
 56305-33-0P 56305-34-1P 56305-35-2P
 56305-36-3P 56305-37-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 53799-85-2 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-propynyl ester (9CI) (CA INDEX NAME)

L6 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 56305-14-7 CAPLUS
 CN Phosphorodiamidic acid, tetraethyl-, 2-propynyl ester (9CI) (CA INDEX NAME)

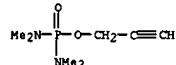
RN 56305-15-8 CAPLUS
 CN Phosphorodiamidic acid, tetrabutyl-, 2-propynyl ester (9CI) (CA INDEX NAME)

RN 56305-20-5 CAPLUS
 CN Phosphorodiamidic acid, tetraethyl-, 2-butynyl ester (9CI) (CA INDEX NAME)

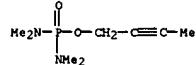
RN 56305-21-6 CAPLUS
 CN Phosphorodiamidic acid, tetraethyl-, 2-octynyl ester (9CI) (CA INDEX NAME)

RN 56305-22-7 CAPLUS
 CN Phosphorodiamidic acid, tetrabutyl-, 2-butynyl ester (9CI) (CA INDEX NAME)

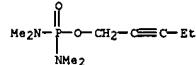
L6 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



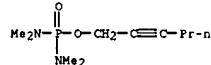
RN 53799-88-5 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-butynyl ester (9CI) (CA INDEX NAME)



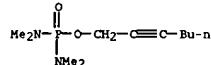
RN 53799-89-6 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-pentynyl ester (9CI) (CA INDEX NAME)



RN 53799-90-9 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-hexynyl ester (9CI) (CA INDEX NAME)

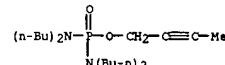


RN 53799-91-0 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-heptynyl ester (9CI) (CA INDEX NAME)

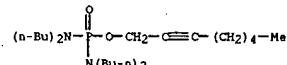


RN 53799-92-1 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 2-octynyl ester (9CI) (CA INDEX NAME)

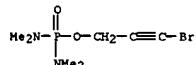
L6 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



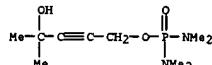
RN 56305-23-8 CAPLUS
 CN Phosphorodiamidic acid, tetrabutyl-, 2-octynyl ester (9CI) (CA INDEX NAME)



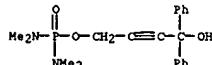
RN 56305-30-7 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 3-bromo-2-propynyl ester (9CI) (CA INDEX NAME)



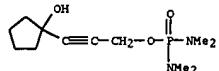
RN 56305-31-8 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 4-hydroxy-4-methyl-2-pentynyl ester (9CI) (CA INDEX NAME)



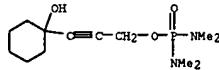
RN 56305-32-9 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 4-hydroxy-4,4-diphenyl-2-butynyl ester (9CI) (CA INDEX NAME)



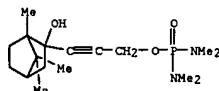
RN 56305-33-0 CAPLUS
 CN Phosphorodiamidic acid, tetramethyl-, 3-(1-hydroxycyclopentyl)-2-propynyl ester (9CI) (CA INDEX NAME)



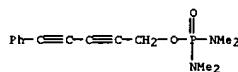
RN 56305-34-1 CAPLUS
 CN Phosphorodiamic acid, tetramethyl-, 3-(1-hydroxycyclohexyl)-2-propynyl ester (9CI) (CA INDEX NAME)



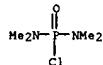
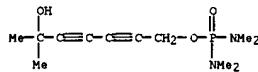
RN 56305-35-2 CAPLUS
 CN Phosphorodiamic acid, tetramethyl-, 3-(2-hydroxy-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl)-2-propynyl ester (9CI) (CA INDEX NAME)



RN 56305-36-3 CAPLUS
 CN Phosphorodiamic acid, tetramethyl-, 5-phenyl-2,4-pentadiynyl ester (9CI) (CA INDEX NAME)



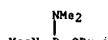
RN 56305-37-4 CAPLUS
 CN Phosphorodiamic acid, tetramethyl-, 6-hydroxy-6-methyl-2,4-heptadiynyl ester (9CI) (CA INDEX NAME)



RN 3402-24-2 CAPLUS
 CN Phosphorodiamic acid, tetramethyl-, ethyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 36055-83-1 CAPLUS
 CN Phosphorodiamic acid, tetramethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1974:519849 CAPLUS

DOCUMENT NUMBER: 81:119849

TITLE: Novel and versatile synthetic reagent. Monoalkyl esters of tetraalkylphosphorodiamic acid

AUTHOR(S): Hargis, J. H.; Alley, W. D.

CORPORATE SOURCE: Dep. Chem., Auburn Univ., Auburn, AL, USA

SOURCE: Journal of the American Chemical Society (1974),

96(18), 5927-8

CODEN: JACSAT ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Esters (Me2N)2POR (R = Me, PhCH2) have been shown to react rapidly and in good yield with polyhalogenated hydrocarbons CCl4, PhCCl3, and CCl3CO2Et

to give RCCl3, RCCl2Ph, and RCCl2CO2Et. A mechanism involving

nucleophilic attack of P upon Cl is suggested.

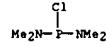
IT 3348-44-5

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and esterification of)

RN 3348-44-5 CAPLUS

CN Phosphorodiamic acid, tetramethyl-, (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



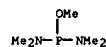
IT 17166-16-4P 53617-91-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with trichloromethyl compds.)

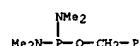
RN 17166-16-4 CAPLUS

CN Phosphorodiamic acid, tetramethyl-, methyl ester (8CI, 9CI) (CA INDEX NAME)



RN 53617-91-7 CAPLUS

CN Phosphorodiamic acid, tetramethyl-, phenylmethyl ester (9CI) (CA INDEX NAME)



IT 1605-65-8P 3402-24-2P 36055-83-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 1605-65-8 CAPLUS

CN Phosphorodiamic acid, tetramethyl-, (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

ACCESSION NUMBER: 1974:47477 CAPLUS

DOCUMENT NUMBER: 80:47477

TITLE: N-Alkyl(or alkenyl) O-(3-chloro-2-butenoyl)phosphorodiimides

INVENTOR(S): Sugiyama, Hiroshige; Takita, Kiyoshi; Ito, Hideo

PATENT ASSIGNEE(S): Kumiai Chemical Industry Co., Ltd.

SOURCE: Jpn., Tokyo Koho, 5 pp.

CODEN: JAXAD

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48032095	B	19731004	JP 1970-45174	19700528

PRIORITY APPLN. INFO.: AB R1R2NP(O)(NMe2)OCCH2CH:CClMe (I; R1, R2 = H, alkyl, alkenyl, R2, R4 = alkyl, alkenyl) bactericides and fungicides, were prepared by treating R1R2NP(O)(NMe2)C1 (II) with MeCCl:CHCH2OH (III). E.g., 19 g II (R1=Et) and 0.5 g III were stirred with 5.8 g KOH and the mixture heated 15 hr at 80-90° to give 82% corresponding I. Similarly prepared were the following (I; R1, R2, R3, and R4 given): Pr, Br, Fr, Pr Fr; Me, Me, Me, H, iso-Pr, H, iso-Pr, H, allyl, H, allyl.

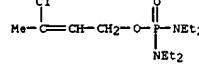
IT 51367-86-3P 51367-87-4P 51367-88-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

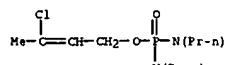
RN 51367-86-3 CAPLUS

CN Phosphorodiamic acid, tetraethyl-, 3-chloro-2-butenoyl ester (9CI) (CA INDEX NAME)



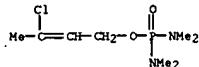
RN 51367-87-4 CAPLUS

CN Phosphorodiamic acid, tetrapropyl-, 3-chloro-2-butenoyl ester (9CI) (CA INDEX NAME)

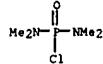


RN 51367-88-5 CAPLUS

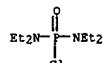
CN Phosphorodiamic acid, tetramethyl-, 3-chloro-2-butenoyl ester (9CI) (CA INDEX NAME)



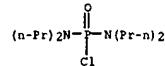
IT 1605-65-8 1794-24-7 40881-95-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with chlorobutyl enol alc.)
 RN 1605-65-8 CAPLUS
 CN Phosphorodiamicid chloride, tetramethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 1794-24-7 CAPLUS
 CN Phosphorodiamicid chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 40881-95-6 CAPLUS
 CN Phosphorodiamicid chloride, tetrapropyl- (9CI) (CA INDEX NAME)

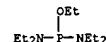


RN 3402-28-6 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

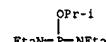
ACCESSION NUMBER: 1972:59101 CAPLUS
 DOCUMENT NUMBER: 76:59101
 TITLE: Preparation of carboxylic esters and phosphoric esters by the activation of alcohols
 AUTHOR(S): Mitsunobu, Oyo; Eguchi, Masahiko
 CORPORATE SOURCE: Coll. Sci. Eng., Aoyama Gakuin Univ., Tokyo, Japan
 SOURCE: Bulletin of the Chemical Society of Japan (1971), 44(12), 3427-30
 CODEN: BCSJA8; ISSN: 0009-2673
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 76:59101

AB The reaction of dibenzyl H phosphate with alcohols, in the presence of di-Et a zodicarboxylate and PhOP, followed by catalytic hydrogenation, resulted in the formation of the corresponding alkyl di-H phosphates. When p-tolyl di-H phosphate and EtOH were allowed to react with di-Et azodicarboxylate and PhOP, Et p-tolyl H phosphate and di-Et p-tolyl phosphate were obtained. On the other hand, dipyradimium p-tolyl phosphate gave Et p-tolyl H phosphate and di-p-tolyl pyrophosphate. The reaction of alkyl N,N'-tetraethylphosphorodiamicidites with carboxylic acids in the presence of di-Et azodicarboxylate resulted in the formation of corresponding carboxylic esters. When these reactions (benzoylation) were carried out with the use of optically active 2-octanol, 2-octyl benzoate was obtained with inverted configuration.

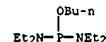
IT 2632-88-4 3402-28-6 3402-30-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with acid in presence of diethyl azodicarboxylate)
 RN 2632-88-4 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)



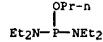
RN 3402-28-6 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)



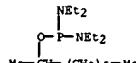
RN 3402-30-0 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, butyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 30504-40-6 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, propyl ester (9CI) (CA INDEX NAME)

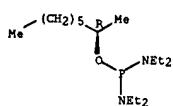


RN 34881-27-1 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, 1-methylheptyl ester (9CI) (CA INDEX NAME)

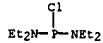


RN 36404-22-5 CAPLUS
 CN Phosphorodiamicidous acid, tetraethyl-, 1-methylheptyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 685-83-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with octanol)
 RN 685-83-6 CAPLUS
 CN Phosphorodiamicidous chloride, tetraethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



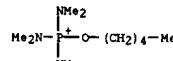
ACCESSION NUMBER: 1971:488039 CAPLUS
 DOCUMENT NUMBER: 75:88039
 TITLE: Alkoxy phosphonium salts. I. Preparation, stability, and reactivity of alkoxytris(dimethylamino)phosphonium salts containing primary alkyl groups
 AUTHOR(S): Castro, Bertrand; Selva, Claude
 CORPORATE SOURCE: Lab. Chim. Org., Fac. Sci., Nancy, Fr.
 SOURCE: Bulletin de la Societe Chimique de France (1971), (6), 2206-9
 CODEN: BSCFAS; ISSN: 0037-8968
 DOCUMENT TYPE: Journal
 LANGUAGE: French

AB Primary alkanols were treated with P(NMe2)3-CCl4 to give phosphonium chlorides ROP-(NMe2)3-Cl- (I). I were treated in situ with nucleophiles to give P(O-(NMe2)3) (III). Thus, PhCH2OH was treated with P(NMe2)3-CCl4 to give (benzylony)tris(dimethylamino)phosphonium chloride (III). Similarly prepared were I (R = amyl, hexyl, n-heptyl). III was treated with NaNH3 to give II and PhCH2N3. Similarly, I were treated with NH4SCN, PhSH, KCN, and KI to give the corresponding RSCN, RSPh, RKN, and RI. RP-(NMe2)3 ClO4- (R = PhCH2O, pentylony, hexyloxy, heptyloxy, Cl) was isolated and their NMR spectra taken.

IT 32798-28-0P 32798-29-1P 32798-30-4P
 32798-31-5P 32798-11-3P
 RL: SPM (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 32798-28-0 CAPLUS
 CN Phosphorus(1+), tris(N-methylmethanaminato)(pentylony)-, (T-4)-, perchlorate (9CI) (CA INDEX NAME)

CH 1

CRN 45168-55-6
 CNF C11 H29 N3 O P

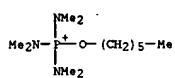


CH 2

CRN 14797-73-0
 CNF Cl O4



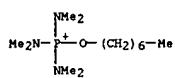
RN 32798-29-1 CAPLUS
 CN Phosphorus(1+), tris(dimethylaminato)(hexyloxy)-, perchlorate (9CI) (CA INDEX NAME)

CRN 45188-07-6
CNF C12 H31 N3 O P

CM 2

CRN 14797-73-0
CNF C1 O4RN 32798-30-4 CAPLUS
CN Phosphorus(1+), tris(dimethylaminato)(heptyloxy)-, perchlorate (8CI) (CA INDEX NAME)

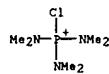
CM 1

CRN 45213-16-9
CNF C13 H33 N3 O P

CM 2

CRN 14797-73-0
CNF C1 O4RN 32798-31-5 CAPLUS
CN Phosphorus(1+), chlorotris(N-methylmethanaminato)-, (T-4)-, perchlorate

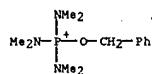
CM 1

CRN 32803-80-8
CNF C6 H18 Cl N3 O P

CM 2

CRN 14797-73-0
CNF C1 O4RN 32978-11-3 CAPLUS
CN Phosphorus(1+), (benzenemethanolato)tris(N-methylmethanaminato)-, (T-4)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 46852-57-7
CNF C13 H25 N3 O P

CM 2

CRN 14797-73-0
CNF C1 O4